

Arizona/Sonora Action Plan

Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target
Goal 1: Reduce Air Pollution					
Objective 1: By 2020, in accordance with the NAFTA, promote the reduction of the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible reduction measures.					
Study by DOT (FHWA) on wait times and emissions at Ports of Entry	FHWA/ EPA/ SEMARNAT		DOT	Sylvia Grijalva (USDOT)	To be completed — December 2012
Initiate a Vehicle Emissions Verification Program in Sonora. Would require inspection of passenger vehicles to meet state emission standards.	CEDES/ SEMARNAT				Ongoing
Possible Project at the Mariposa POE (identify a specific project or delete)	Multi-Agency			Melissa Walker (AZ Commerce)	
Objective 2: By 2020, reduce pollutant emissions in order to approach attainment of respective national ambient air quality standards in the following airsheds: Ambos Nogales					
Complete and implement PM-10 State Plan for Ambos Nogales	ADEQ			ADEQ	
Creation of a regional nursery for the production of flora to be used in the reforestation of the Rio Altar Region (Sonora)	Rio de Altar/ CEDES/ SEMARNAT/ Comisión Nacional Forestal	\$172,000	RHQ-Comisión Nacional Forestal		
Creation of a regional nursery for the production of flora to be used in the reforestation of the Rio Altar Region (Sonora)	Rio de Altar/ CEDES/ SEMARNAT/ Comisión Nacional Forestal	\$162,200	RHQ-Comisión Nacional Forestal		
Ambos Nogales Outreach Activities (transition to a web-based/electronic calendar-outreach source)	EPA/ ADEQ/ CEDES			Border Office (ADEQ)	
Placeholder for road paving projects in Sonora.	BECC/ NADB				
Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to air quality data in Arizona/Sonora					
Develop and implement a strategy for enhanced coordination of air monitoring and related activities in border communities	CEDES, ADEQ, EPA, SEMARNAT				
Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States (as appropriate), and build the necessary capacity to guarantee sustained implementation.					
Sonora Climate Change Action Plan Mitigation Cost Benefit Analysis (Phase II)	CEDES, BECC, INE	\$275,000	BECC	T. Balarezo (BECC)	Complete Phase II
Objective 5: By 2020, reduce emissions and associated impacts through energy efficiency and/or alternative/renewable energy projects.					
Encourage (in all sectors) the eco efficiency, application of clean technologies and the generation and use of renewable energy.	TBD	TBD	TBD	TBD	TBD

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Goal 2: Improve Access to Clean and Safe Water					
Objective 1: Promote the increase in the number of homes connected to safe drinking water and adequate wastewater treatment.					
Sub-objective 1a: By 2015, promote access to safe drinking water to at least 5,000 households. Revise target every two years.					
US-Mexico Border Water Infrastructure Program drinking water projects currently under construction.	EPA/ CONAGUA/ BECC/ NADB		Border Environment Infrastructure Fund (BEIF)	Awilda Fuentes (EPA HQ)	Combined total: 5000 households
Sub-objective 1b: By 2015, promote access to adequate wastewater sanitation to 42,000 households. Revise target every two years.					
US-Mexico Border Water Infrastructure Program wastewater projects currently under construction.	EPA/ CONAGUA/ BECC/ NADB		BEIF	Awilda Fuentes (EPA HQ)	Combined total: 42,000 households, XX million gallons of wastewater treated
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.					
Sub-objective 2a: Incorporate sustainable infrastructure elements, as feasible and appropriate, into U.S.-Mexico Border Water Infrastructure Program-supported BECC-certified projects.					
EPA Region 9 will incorporate sustainable infrastructure components in the development phase of US-Mexico Border Water Infrastructure Program projects.	USEPA/ CONAGUA/ BECC			Hector Aguirre (EPA Reg. 9)	
Sub-objective 2b: Improve energy efficiency and efficient water use provided by drinking water and wastewater service providers in the border region.					
Region 9 will include energy audits in the final design of 8 US-Mexico Border Water Infrastructure Program projects.	USEPA/ CONAGUA/ BECC		PDAP	Renata Manning (BECC)	Energy audit reports for in at least 8 communities
Region 9 will include water audits in the final design of US-Mexico Border Water Infrastructure Program projects. (How many are anticipated?)	USEPA/ CONAGUA/ BECC			Hector Aguirre (EPA Reg. 9)	Water audit reports for selected communities
Sub-objective 2c: Build operational, managerial and financial capacity through training of drinking water and wastewater service providers in the border region.					
Wastewater operations training in seven Mexican border communities including Matamoros, Reynosa, Ciudad Juarez, Nogales,	EPA/ NADB	\$137,000	EPA Border 2012	Salvador Gandara (EPA)	50 people trained, 288 hours of training over 18 courses

and San Luis Rio Colorado, Mexicali, and Tijuana.					
Solar power at the Los Alisos Wastewater Treatment Plant	EPA, BECC	\$210,000	EPA	Thomas Konner (EPA, Reg. 9)	Final design on a 902 KW photovoltaic plant with peak capacity of 1572 MWh/year
Objective 3: Work bi-nationally to identify and reduce surface water contamination in transboundary waterbodies and watersheds.					
Creation of a regional nursery for the production of flora to be used in the reforestation of the Rio Altar Region (Sonora)	Rio de Altar, CEDES, SEMARNAT Comisión Nacional Forestal	\$172,000	RHQ-Comisión Nacional Forestal		
Creation of a regional nursery for the production of flora to be used in the reforestation of the Rio Altar Region (Sonora)	Rio de Altar, CEDES, SEMARNAT Comisión Nacional Forestal	\$162, 200	RHQ-Comisión Nacional Forestal		
Sub-objective 3b: Every two years, identify and implement at least one project to reduce the level of heavy metals, sediment, and/or bacteria entering the Santa Cruz River and/or the Nogales Creek.					
Sampling and testing equipment and supplies to support Nogales, Sonora pretreatment program	IBWC	Est \$10,000		Calos Peña (IBWC)	Prepare joint agreement, provide support
Nogales, Sonora wastewater project for Southwest zone of Nogales.	CONAGUA/ EPA/ BECC/ NADB	\$12M total construction	PDAP	Thomas Konner (Reg. 9 EPA)	BECC Certification of project
Hold regular bi-national meetings to bring US and Mexican technical experts together to discuss issues, alternatives, and resources.	IBWC			Wayne Belzer (IBWC)	
Hold biannual Water Task Force meetings, which will include updates on status of previously funded Border 2012 projects, such as stormwater detention devices, stream gauge monitors, and water harvesting projects. Also will provide status on rehabilitation of the International Outfall Interceptor.	ADEQ/ IBWC/ CILA/ CONAGUA	?		Hans Huth (ADEQ)	Hold 4 task force meetings
Objective 4: Provide the public with timely access to water quality data in binational waterbodies and watersheds in a readily understandable, web-based format.					
Sub-objective 4c: Develop a binational website that displays timely information on water quality in high-priority watersheds including the Lower Rio Grande, the New River, and the Tijuana River and ensure operation of website through 2020.					
Access to Friends of the Santa Cruz River (FOSCR) volunteer monitoring data for the Upper Santa Cruz River	ADEQ		Hans Huth, (ADEQ)	Hans Huth, (ADEQ)	Website developed and operated

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Goal 3: PROMOTE MATERIALS MANAGEMENT AND WASTE MANGEMENT AND CLEAN SITES					
Objective 1: By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.					
<p>Provide outreach and training on sustainable materials management, best management practices, innovations and lessons learned by generators/businesses, tools such as life cycle analysis, and regulatory trends.</p> <p>E-waste: Address electronic waste (E-waste) best management practices based on existing certification programs [Responsible Recyclers (R2) and E-Stewards].</p> <p>Zero waste/special waste management: Address zero waste mangement concepts and guidance on compliance with Mexico's Norm 161 on "special waste" manaegment plans. (Implement basic training in both AZ/Son & CA/Baja CA*).</p>	EPA/ SEMARNAT/ BECC/ ADEQ/ CEDES	<p>Minimal to None</p> <p>(Use webinar-based training options to minimize costs)</p>	Leverage in-kind (Assume minimal costs by inviting speakers from government and industry; no travel costs assumed	E. Pimentel; (EPA); Verónica García (ADEQ), Alfredo Ríos DTSC- Ewaste); Sergio Gasca (SEMARNAT-special waste);	<p>Complete at least two trainings (e.g. webinar based) on E-waste and Zero waste/special waste topics.</p> <p>Measure number of participants and business or institutions reached and individuals that participate in training.</p>
<p>Increase awareness and knowledge on diversion of organic waste (green waste and food scraps) from landfills to composting. (Implement via CA/Baja CA).</p> <p>[Training being lead by Baja CA non-profit, but could also be offered to AZ/Sonora interested individuals; targeting industry-generated food waste diversion and developing composting via municipal program.]</p>	EPA/ SEMARNAT/ Tijuana Calidad de Vida/ Municipality of Tijuana/ and other civic organizations	<p>Minimal to None</p> <p>(Use webinar-based training options to minimize costs)</p>	Leverage in-kind support from Tijuana Calidad de Vida, City of Tijuana, EPA, SPA, and others	Leverage in-kind (Leverage training thru second phase of existing project in Baja CA, Tijuana Calidad de Vida and other invited ; no travel costs assumed)	<p>Complete at least two trainings (webinar based or other outreach-training format).</p> <p>Measure number of participants and business/institutions reached and individuals that participate in training.</p>
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.					
Train interested "recyclers" operating in border region, on E-waste certification requirements (based on Responsible	EPA/ SEMARNAT/ ADEQ/ CEDES/ and non-profit "recycling"	\$120,000	EPA border funds and leverage in-kind	Emily Pimentel (EPA Reg. 9) Verónica García	Complete training of at least five firms (in border region).

Recyclers (R2) and e-Stewards certification programs).	certification program organizations			(ADEQ) & Gerardo Mayoral (ADEQ)	Measure number of participants and business/institutions reached and individuals that participate in training and number of new firms taking steps to get certified by 2020 in border states.
Increase capacity to develop and comply with special waste management plans in Sonora, based on MX Norm 161. Use existing Sonora border region waste inventory to identify waste stream priorities for development of waste management plans and target strategic industry material/waste streams.	CEDES/ SEMARNAT	In Kind	CEDES/ SEMARNAT	TBD (CEDES)	Model special waste management plan template and guidance on applying Mx Norm 161.
Solid waste trash collection vehicles for the municipality of Magdalena, Sonora	Magdalena/ CEDES, SEMARNAT	\$189,000	SEMARNAT; Dirección General de Fomento Ambiental Urbano y Turístico (DGFAUT)	Joaquín Marruffo (SPA); C. Chávez (SEMARNAT)	Acquisition of a solid waste trash collection vehicles for the municipality of Magdalena, Son
Scrap tire shredder	CEDES/ SEMARNAT	\$246,500	SEMARNAT; (DGFAUT)	Joaquín Marruffo (SPA); C. Chávez (SEMARNAT)	Acquisition of a scrap tire shredder
Objective 3: By 2020, improve knowledge at every level of government (federal, state, local) to characterize and remediate contaminated sites.					
Improve remediation knowledge associated with specific waste streams (e.g. lead, pesticides, mine tailings) and site categories (e.g. metal smelters, UST, etc.) Provide training (webinar- based) on topics of binational interest and promote development of U.S.-Mexico network by leveraging EPA's Clean-up Information Program (www.clu-in.org).	EPA/ SEMARNAT/ INE	\$5,000	EPA, SEMARNAT, ADEQ, CEDES	Emily Pimentel (EPA Reg. 9); SEMARNAT (TBD); Verónica García (ADEQ); Gerardo Mayoral (ADEQ)	Complete at least one training (webinar based or other outreach-training format). Measure number of participants and business or institutions reached and individuals that participate in training.
Objective 4: On an annual basis, implement the Binational Consultative Mechanism on sharing information on border area hazardous waste facilities.					
Work with the Waste Policy Forum to facilitate access to binational information associated with any new and existing facilities that manage hazardous waste in	ADEQ/ CEDES/ EPA/ SEMARNAT	In-kind	In-kind EPA, SEMARNAT, and State Program Funding	Rick Picardi (EPA HQ) Eduardo Gonzalez Hernandez (SEMARNAT)	Annually report, unless there are proposed new facilities in which case the respective countries should be notified within 30 days of a petition for

the U.S.-Mexico border per the Consultative Mechanism.					a facility permit.
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Goal 4: Enhance Joint Preparedness for Environmental Response					
Objective 1: Update as necessary, the current Mexico-US Joint Contingency Plan and on an annual basis, continue to evaluate and update the emergency notification mechanism between Mexico and the United States.					
Table top exercises in Sonora and One Additional City	PROFEPA/ Civil Protection/ Local Responders	\$100,000	EPA Superfund	Lida Tan (EPA Reg. 9)	Table top exercise in Sonora and one additional City. Identify recommendations for improvements
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.					
Trinational Contingency Plan for Tohono O'odham, Yuma, and San Luis Rio Colorado	Tohono O'odham/ City of Yuma/ City of San Luis Rio Colorado	\$80,000	EPA Superfund	Lida Tan (EPA Reg. 9)	Finalization of the plan
Objective 3: By 2016, the US-Mexico JRT will make available technical outreach and training materials for distribution and dissemination along the border.					
Distribution of DOT Emergency Response Guide	Arizona Emergency Management	\$2,500	EPA Superfund	Lida Tan (EPA Reg. 9)	750 Spanish copies distributed
Distribution of ICS,PPE, Fire Safety, Radiation Safety, Mercury Response, FRA	Arizona Emergency Management	\$10,000	EPA Superfund	Lida Tan (EPA Reg. 9)	Distribute subject materials in Spanish
Objective 4: By 2016, the US-Mexico JRT will analyze existing agreements (including sister city plans) that allow trans-boundary movement of equipment and personnel for comparison purposes.					

Arizona/Sonora Two Year Action Plan

Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target
Goal 5: Enhance Compliance Assurance and Environmental Stewardship					
Objective 1: By 2020, strengthen effective information sharing between U.S. and Mexican agencies regarding the movement of hazardous waste across the border and its ultimate treatment or disposal. In addition, ensure that land ports-of-entry have sufficient inspection capacity to police hazardous waste shipments.					
Support Hazardous Waste Port-of-Entry Inspections at the Nogales Commercial Port	ADEQ, U.S. CBP, EPA		EPA RCRA Grant	Emily Pimentel (EPA Reg. 9) & Ivan Lieben (EPA Reg. 9); Veronica Garcia (ADEQ)	Work out improved access by ADEQ to the Nogales Port-of-Entries for inspections
Objective 2: By 2020, in Mexico, increase by 25 percent the number of businesses in the border region enrolled in the <i>National Program for Environmental Auditing (PNAE)</i> and/or similar programs at the state level for facilities not regulated by the federal government, using 2012 as a baseline.					
PROFEPA to complete this section					This field will be updated in 2013 and 2014
Objective 3: Using the U.S. Toxic Release Inventory (TRI) and the Mexican Registry of Emissions and Transfers of Pollutants (RETC), along with other sources of environmental information, share information regarding activities contributing pollution to transboundary air and/or water basins along the border.					
Increases public knowledge of industrial discharges/releases, using EPA's Toxic Release Inventory (TRI). Prepare TRI factsheets highlighting 2011 data in the Arizona Border Region	US EPA- Region 9	Staff Time	N/A	José García (EPA Reg. 9)	One factsheet covering TRI releases in Arizona border region
Should we add something similar to the above for Sonora	SEMARNAT				
Objective 4: By 2020, implement at least five (5) binational workshops targeted to environmental enforcement professionals, including port-of-entry customs professionals, to promote the exchange of information and improve understanding of each country's respective compliance and enforcement programs and tools, including field inspection and case studies.					
Provide training to Mexican inspectors on ADEQ's plating shop inspection initiative.	ADEQ, EPA, PROFEPA, SEMARNAT, CEDES	ADEQ: FTE Translation: \$3,000	Border 2020 Request for Proposals	Veronica Garcia (ADEQ) Eder Delgadillo (ADEQ)	Report Annually. Translate training materials. Provide training. Conduct follow-up with training attendees.
Intelligence/information sharing of transboundary movement of hazardous waste	EPA Region 9, CBP, PROFEPA, ADEQ, CEDES	Staff FTE Translation: \$3,000	Border 2020 Request for Proposals	Eder Delgadillo (ADEQ) Inspector Supervisor (ADEQ)	Improved intelligence and information on transboundary waste moving across the border

